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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER	
STOFFREGEN, JOEL	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/734,486	DA PALMA ET AL.	
	Examiner	Art Unit	
	Joel Stoffregen	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *12 December 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-12* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-12* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *12 December 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *12/12/2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

1. This action is in response to the original application filed on 12/12/2003.

2. Claims 1-12 are currently pending in this application. Claims 1, 3, 5, 7, 9, and 11 are independent claims.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. **Claims 1-12** are rejected under 35 U.S.C. 103(a) as being unpatentable over Hank et al. Patent No.: US 6,321,198 ("HANK") in view of Sharp et al. Patent No.: US 4,093,831 ("SHARP").

5. Regarding **claim 1**, HANK teaches a method for simulating a run-time user interaction with a voice application ("simulation of the application", column 2, lines 8-9), said method comprising the steps of:

loading a user simulation script ("caller recordings in log 48, column 4, line 67) programmed to specify simulated voice interactions with the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43);

deriving from the voice application a nominal output ("produce the annotated ASR corpus 58", column 4, lines 23-34), the nominal output including a text stream (see FIG. 3, "ASCII text" leading to block 58);

processing the user simulation script to generate a simulated output for the voice application corresponding to the nominal output ("run time 85 makes use of the annotated ASR corpus in block 58 to convert the text on line 78 to the token on line 79 which is later converted to meaningful digital prompts and replies by the IVR call flow system 65", see FIG. 5, column 5, lines 41-44); and

executing the simulated output in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated output.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an output ("computed total cycle time", column 2, line 44), the execution time being equal to a length of the text stream ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the output timing method of Sharp et al. with the

simulation system of Hank et al. in order to give the user a sufficient interval to interpret the output (see SHARP, column 1, lines 23-33).

6. Regarding **claim 2**, HANK further teaches:

processing the user simulation script (log 48) to generate a simulated input for the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43), the simulated input including a text equivalent of a pre-determined user input (see FIG 11A, part 106, the simulation of the user is displayed as text); and

executing the simulated input in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated input.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an input ("computed total cycle time", column 2, line 44), the execution time being equal to a length of the text equivalent of the pre-determined user input ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the input timing method of Sharp et al. with the

simulation system of Hank et al. in order to give the user a sufficient interval to interpret what is being input (see SHARP, column 1, lines 23-33).

7. Regarding **claim 3**, HANK teaches a method for simulating a run-time user interaction with a voice application ("simulation of the application", column 2, lines 8-9), said method comprising the steps of:

loading a user simulation script ("caller recordings in log 48, column 4, line 67) programmed to specify simulated voice interactions with the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43);

deriving from the voice application a nominal output ("produce the annotated ASR corpus 58", column 4, lines 23-34), the nominal output including an audio stream ("run time 85 makes use of the annotated ASR corpus in block 58 to convert the text on line 78 to the token on line 79 which is later converted to meaningful digital prompts and replies by the IVR call flow system 65", see FIG. 5, column 5, lines 41-44);

processing the user simulation script to generate a simulated output for the voice application corresponding to the nominal output ("run time 85 makes use of the annotated ASR corpus in block 58 to convert the text on line 78 to the token on line 79 which is later converted to meaningful digital prompts and replies by the IVR call flow system 65", see FIG. 5, column 5, lines 41-44); and

executing the simulated output in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated output.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an output ("computed total cycle time", column 2, line 44), the execution time being equal to a length of the text stream ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the output timing method of Sharp et al. with the simulation system of Hank et al. in order to give the user a sufficient interval to interpret the output (see SHARP, column 1, lines 23-33).

8. Regarding **claim 4**, HANK further teaches:

processing the user simulation script (log 48) to generate a simulated input for the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43), the simulated input including an audio equivalent of a pre-determined user input ("caller's voice can be recorded and saved in log 48", column 4, line 59); and

executing the simulated input in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated input.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an input ("computed total cycle time", column 2, line 44), the execution time being equal to a length of the text equivalent of the pre-determined user input ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the input timing method of Sharp et al. with the simulation system of Hank et al. in order to give the user a sufficient interval to interpret what is being input (see SHARP, column 1, lines 23-33).

9. Regarding **claim 5**, HANK teaches a machine readable storage having stored thereon a computer program ("software 24", column 3, line 37) simulating a run-time user interaction with a voice application ("simulation of the application", column 2, lines 8-9), said computer program comprising a routine set of instructions which when executed by a machine ("computer 22", column 3, line 36) cause the machine to perform the steps of:

loading a user simulation script ("caller recordings in log 48, column 4, line 67) programmed to specify simulated voice interactions with the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43);

deriving from the voice application a nominal output ("produce the annotated ASR corpus 58", column 4, lines 23-34), the nominal output including a text stream (see FIG. 3, "ASCII text" leading to block 58);

processing the user simulation script to generate a simulated output for the voice application corresponding to the nominal output ("run time 85 makes use of the annotated ASR corpus in block 58 to convert the text on line 78 to the token on line 79 which is later converted to meaningful digital prompts and replies by the IVR call flow system 65", see FIG. 5, column 5, lines 41-44); and

executing the simulated output in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated output.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an output ("computed total cycle time", column 2, line 44), the execution time being equal to a length of the text stream ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the output timing method of Sharp et al. with the

simulation system of Hank et al. in order to give the user a sufficient interval to interpret the output (see SHARP, column 1, lines 23-33).

10. Regarding **claim 6**, HANK further teaches:

processing the user simulation script (log 48) to generate a simulated input for the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43), the simulated input including a text equivalent of a pre-determined user input (see FIG 11A, part 106, the simulation of the user is displayed as text); and

executing the simulated input in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated input.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an input ("computed total cycle time", column 2, line 44), the execution time being equal to a length of the text equivalent of the pre-determined user input ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the input timing method of Sharp et al. with the

simulation system of Hank et al. in order to give the user a sufficient interval to interpret what is being input (see SHARP, column 1, lines 23-33).

11. Regarding **claim 7**, HANK teaches a machine readable storage having stored thereon a computer program ("software 24", column 3, line 37) simulating a run-time user interaction with a voice application ("simulation of the application", column 2, lines 8-9), said computer program comprising a routine set of instructions which when executed by a machine ("computer 22", column 3, line 36) cause the machine to perform the steps of:

loading a user simulation script ("caller recordings in log 48, column 4, line 67) programmed to specify simulated voice interactions with the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43);

deriving from the voice application a nominal output ("produce the annotated ASR corpus 58", column 4, lines 23-34), the nominal output including an audio stream ("run time 85 makes use of the annotated ASR corpus in block 58 to convert the text on line 78 to the token on line 79 which is later converted to meaningful digital prompts and replies by the IVR call flow system 65", see FIG. 5, column 5, lines 41-44);

processing the user simulation script to generate a simulated output for the voice application corresponding to the nominal output ("run time 85 makes use of the annotated ASR corpus in block 58 to convert the text on line 78 to the token on line 79 which is later converted to meaningful digital prompts and replies by the IVR call flow system 65", see FIG. 5, column 5, lines 41-44); and

executing the simulated output in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated output.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an output ("computed total cycle time", column 2, line 44), the execution time being equal to a length of the text stream ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the output timing method of Sharp et al. with the simulation system of Hank et al. in order to give the user a sufficient interval to interpret the output (see SHARP, column 1, lines 23-33).

12. Regarding **claim 8**, HANK further teaches:

processing the user simulation script (log 48) to generate a simulated input for the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43), the simulated input including an audio equivalent of a pre-determined user input ("caller's voice can be recorded and saved in log 48", column 4, line 59); and

executing the simulated input in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated input.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an input ("computed total cycle time", column 2, line 44), the execution time being equal to a length of the text equivalent of the pre-determined user input ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the input timing method of Sharp et al. with the simulation system of Hank et al. in order to give the user a sufficient interval to interpret what is being input (see SHARP, column 1, lines 23-33).

13. Regarding **claim 9**, HANK teaches a simulation tool for simulating a run-time user interaction with a voice application ("simulation of the application", column 2, lines 8-9) running on an application server ("computer 22", column 3, line 36), said tool being configured to load a user simulation script ("caller recordings in log 48, column 4, line 67) programmed to specify simulated voice interactions with the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43), and to:

first process the voice application to derive a nominal output of the voice application ("produce the annotated ASR corpus 58", column 4, lines 23-34), the nominal output including a text stream (see FIG. 3, "ASCII text" leading to block 58);

second process the user simulation script to generate a simulated output for the voice application corresponding to the nominal output ("run time 85 makes use of the annotated ASR corpus in block 58 to convert the text on line 78 to the token on line 79 which is later converted to meaningful digital prompts and replies by the IVR call flow system 65", see FIG. 5, column 5, lines 41-44); and

execute the simulated output in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated output.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an output ("computed total cycle time", column 2, line 44), said execution time being equal to a length of the text stream ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the output timing method of Sharp et al. with the simulation system of Hank et al. in order to give the user a sufficient interval to interpret the output (see SHARP, column 1, lines 23-33).

14. Regarding **claim 10**, HANK further teaches that the tool is further configured to:

process the user simulation script (log 48) to generate a simulated input for the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43), the simulated input including a text equivalent of a pre-determined user input (see FIG 11A, part 106, the simulation of the user is displayed as text); and

execute the simulated input in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated input.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an input ("computed total cycle time", column 2, line 44), said execution time being equal to a length of the text equivalent of the pre-determined user input ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the input timing method of Sharp et al. with the simulation system of Hank et al. in order to give the user a sufficient interval to interpret what is being input (see SHARP, column 1, lines 23-33).

15. Regarding **claim 11**, HANK teaches a simulation tool for simulating a run-time user interaction with a voice application ("simulation of the application", column 2, lines 8-9) running on an application server ("computer 22", column 3, line 36), said tool being configured to load a user simulation script ("caller recordings in log 48, column 4, line 67) programmed to specify simulated voice interactions with the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43), and to:

first process the voice application to derive a nominal output of the voice application ("produce the annotated ASR corpus 58", column 4, lines 23-34), the nominal output including an audio stream ("run time 85 makes use of the annotated ASR corpus in block 58 to convert the text on line 78 to the token on line 79 which is later converted to meaningful digital prompts and replies by the IVR call flow system 65", see FIG. 5, column 5, lines 41-44);

second process the user simulation script to generate a simulated output for the voice application corresponding to the nominal output ("run time 85 makes use of the annotated ASR corpus in block 58 to convert the text on line 78 to the token on line 79 which is later converted to meaningful digital prompts and replies by the IVR call flow system 65", see FIG. 5, column 5, lines 41-44); and

execute the simulated output in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated output.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an output ("computed total cycle time", column 2, line 44), said execution time being equal to a length of the text stream ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the output timing method of Sharp et al. with the simulation system of Hank et al. in order to give the user a sufficient interval to interpret the output (see SHARP, column 1, lines 23-33).

16. Regarding **claim 12**, HANK further teaches that the tool is further configured to:

process the user simulation script (log 48) to generate a simulated input for the voice application ("start a desk top simulation where no telephone is used", column 9, lines 42-43), the simulated input including an audio equivalent of a pre-determined user input ("caller's voice can be recorded and saved in log 48", column 4, line 59); and

execute the simulated input in conjunction with the voice application ("dialogue simulator executes call flow in accordance with the design", column 4, lines 60-61).

However, HANK does not specifically disclose an execution time for the simulated input.

In the same field of speech processing, SHARP discloses a method of outputting speech at a certain rate. SHARP teaches:

calculating an execution time for an input ("computed total cycle time", column 2, line 44), said execution time being equal to a length of the text equivalent of the pre-determined user input ("number of words", column 2, line 41) divided by an empirical speaking rate of a user ("divided by the selected word reproduction rate", column 2, lines 41-42).

Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to use the input timing method of Sharp et al. with the simulation system of Hank et al. in order to give the user a sufficient interval to interpret what is being input (see SHARP, column 1, lines 23-33).

Conclusion

17. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. A list the pertinent prior art can be found on the included form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joel Stoffregen whose telephone number is (571) 270-1454. The examiner can normally be reached on Monday - Friday, 9:00 a.m. - 6:30 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Edouard can be reached on (571) 272-7603. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JS

PATRICK N. EDOUARD
SUPERVISORY PATENT EXAMINER